

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1-110. (Canceled)
111. (Currently Amended) A method comprising:
applying a PHA solution comprising a solvent and a PHA to a substrate surface to form a layer of the PHA solution;
removing at least some of the solvent to form a PHA adhesive composition on the substrate surface;
wherein the PHA is a poly 3-hydroxybutyrate-co-4-hydroxybutyrate having a glass transition temperature from about -30 °C to about -5 °C; and the adhesive composition has an open time of at least 10 minutes; and the adhesive composition has a surface tack time value of at most about 15 seconds.
112. (Previously Presented) The method of Claim 111, wherein the layer has a thickness of at most about 300 microns.
113. (Previously Presented) The method of Claim 111, wherein the solvent is removed by evaporation.
114. (Previously Presented) The method of Claim 111, wherein the solvent is removed at a temperature at most about 40 °C.
115. (Previously Presented) The method of Claim 111, further comprising contacting the substrate surface having the PHA adhesive composition thereon with a second substrate surface to form an adhesive bond with the second substrate surface.

116. (Previously Presented) The method of Claim 115, wherein the second substrate surface is coated with the PHA adhesive composition before contacted with the substrate surface.
117. (Previously Presented) The method of Claim 115, wherein the second substrate surface is not coated with the PHA adhesive composition before contacted with the substrate surface.
118. (Previously Presented) The method of Claim 111, wherein the PHA has a glass transition temperature from about -25 °C to about -10 °C.
- 119-122. (Canceled)
123. (Previously Presented) An article comprising:
a substrate having a surface; and
an adhesive composition supported by the surface of the substrate, wherein the
adhesive composition comprises a PHA, the PHA being poly 3-
hydroxybutyrate-co-4-hydroxybutyrate having a glass transition
temperature from about -30°C to about -5°C; and the adhesive
composition has an open time of at least 10 minutes; and the adhesive
composition has a surface tack time value of at most about 15 seconds.
124. (NEW) The article of Claim 123, wherein the adhesive composition forms a layer on the surface of the substrate.
125. (NEW) The article of Claim 124, wherein the layer has a thickness of at most about 300 microns.
126. (NEW) The article of Claim 123, further comprising a second substrate surface adhesively bonded to the surface of the article supporting the adhesive composition.
127. (NEW) The article of Claim 123, wherein the PHA has a glass transition temperature from about -25°C to about -10°C.

- 128. (NEW) The article of Claim 123, wherein the adhesive composition comprises multiple different PHAs.
- 129. (NEW) The article of Claim 128, wherein the adhesive composition comprises two different PHAs.
- 130. (NEW) The article of Claim 123, wherein the adhesive composition further comprises one or more solvents.
- 131. (NEW) The article of Claim 130, wherein the adhesive composition comprises at most about 90 weight percent solvent.
- 132. (NEW) The article of Claim 130, wherein the adhesive composition comprises at most about 80 weight percent solvent.
- 133. (NEW) The article of Claim 130, wherein the adhesive composition comprises at most about 75 weight percent solvent.
- 134. (NEW) The article of Claim 130, wherein the adhesive composition comprises at most about 50 weight percent solvent.
- 135. (NEW) The article of Claim 130, wherein the adhesive composition comprises at most about 35 weight percent solvent.
- 136. (NEW) The article of Claim 130, wherein the adhesive composition comprises at most about 1 weight percent solvent.
- 137. (NEW) The article of Claim 130, wherein the adhesive composition comprises an organic solvent.
- 138. (NEW) The article of Claim 137, wherein the organic solvent is selected from the group consisting of hexane, heptane, benzene, toluene, ether, methyl tert-butyl ether, ethyl

acetate, butyl acetate, methylene chloride, chloroform, acetonitrile, methanol, ethanol, isopropanol, and 2,2,2-trifluoroethanol.

- 139. (NEW) The article of Claim 130, wherein the adhesive composition comprises an aqueous solvent.
- 140. (NEW) The article of Claim 130, wherein the adhesive composition comprises two or more solvents.
- 141. (NEW) The article of Claim 123, wherein the adhesive composition further comprises one or more adhesive additives.
- 142. (NEW) The article of Claim 141, wherein the adhesive composition comprises at most about 95 weight percent adhesive additives.
- 143. (NEW) The article of Claim 141, wherein the adhesive composition comprises at most about 50 weight percent adhesive additives.
- 144. (NEW) The article of Claim 141, wherein the adhesive composition comprises at most about 10 weight percent adhesive additives.
- 145. (NEW) The article of Claim 141, wherein the adhesive composition comprises at most about 1 weight percent adhesive additives.
- 146. (NEW) The article of Claim 141, wherein the adhesive additives are selected from the group consisting of tackifiers, cross-linking agents, initiators, colorants, waxes, stabilizers and plasticizers.
- 147. (NEW) The article of Claim 123, wherein the adhesive composition has an open time of at least 100 minutes.
- 148. (NEW) The article of Claim 123, wherein the adhesive composition has an open time of at least 200 minutes.

149. (NEW) The article of Claim 123, wherein the adhesive composition has a surface tack time value of at most about 5 seconds.
150. (NEW) The article of Claim 123, wherein the adhesive composition has a surface tack time value of at most about 1 second.